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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,394	06/24/2003	Zia Rehman	10019249 -1	3066

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FORT COLLINS, CO 80527-2400

EXAMINER

KLEMANSKI, HELENE G

ART UNIT	PAPER NUMBER
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1755

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/06/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/603,394	Applicant(s) REHMAN, ZIA	
	Examiner Helene Klemanski	Art Unit 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-17 and 19-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-17 and 19-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 18, 2007 has been entered.

Response to Amendment

2. Claims 1 and 13 have been amended, claims 5 and 18 have been deleted and no new claims have been added. Hence, claims 1-4, 6-17 and 19-26 are pending in the application.

3. Applicants should note that although claim 13 is not in compliance with 37 CFR 1.121 as the claim modifier “(previously presented)” should be “(currently amended)”, in the interest of compact prosecution, the examiner has considered the amendment, however, applicants should correct this informality in response to this Office Action.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 6-17 and 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al. (US 5,507,865) in view of Moffatt et al. (US 5,106,416).

Yoshida et al. teach an aqueous ink jet ink composition comprising 0.1-20% by weight of a water-soluble dye, preferably a black dye, 0.01-20% by weight of an amino acid such as arginine, lysine, histidine, ornithine and derivatives thereof and water.

Yoshida et al. further teach that additives such as surfactants may be added for their normal functions. See col. 2, lines 25-55, dyes (A), (B) and (C), col. 3, lines 50-65, col. 4, lines 32-58, examples 1-3, Table 2 and claims 1-6. Yoshida et al. fail to specifically teach the addition of an amphoteric (i.e. zwitterionic) surfactant as claimed by applicants.

Moffatt et al. teach an ink jet ink composition containing a zwitterionic surfactant such as N,N-dimethyl-N-dodecyl amine oxide, N,N-dimethyl-N-tetradecyl amine oxide, N,N-dimethyl-N-hexadecyl amine oxide, N,N-dimethyl-N-octadecyl amine oxide, N,N-dimethyl-N-(Z-9-octadecenyl)-N-amine oxide, N-dodecyl -N,N-dimethyl glycine and sulfobetaines wherein the surfactant improves the color bleed between inks. The lowest surfactant concentration where bleed alleviation and improvement in text quality becomes appreciably effective is found to be near the critical micelle concentration which is 0.3 wt% for N,N-dimethyl-N-dodecyl amine oxide, 0.9 wt% for N,N-dimethyl-N-(Z-9-octadecenyl)-N-amine oxide and 0.4 wt% for the sulfobetaine SB3-12. See col. 2, lines 33-36, col. 3, lines 45-50, col. 4, lines 20-64, col. 5, lines 12-20, Table 1, col. 8, lines 13-18 and claims 1-3, 6, 7 and 13.

Therefore, it would have been obvious to one having ordinary skill in the art to modify the aqueous ink jet ink of Yoshida et al. by adding the zwitterionic surfactant of Moffatt et al. in order to improve the color bleed of the aqueous ink when printed next to another ink composition.

Response to Arguments

6. Applicant's arguments filed January 18, 2007 have been fully considered but they are not persuasive.

Applicants argue that there is no motivation to combine the Yoshida et al. and Moffat et al. references since the Yoshida reference adds an amino acid to improve water resistance, provide satisfactory image density and prevent bronzing and the

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Moffat reference adds an amphoteric surfactant to alleviate bleeding between inks. The examiner disagrees since the amphoteric surfactant of Moffatt et al. is added to provide an additional benefit (i.e. preventing bleeding) in addition to the other benefits already shown in the Yoshida reference. Furthermore, applicants state in their specification that the addition of the amphoteric surfactant helps to prevent bleeding between a black ink jet ink of the present invention and a colored ink jet ink (see page 6, lines 10-12).

Applicants further argue that the Yoshida et al. reference only mentions the addition of a surfactant and never specifically identifies that an amphoteric surfactant can be used and unless an amphoteric surfactant is added, increased penetration occurs and negatively impacts the optical density of the ink. The examiner disagrees since the use of the term "surfactant" suggests the addition of any surfactant that is typically added to ink compositions. It is the examiner's position that surfactants are conventionally added to ink compositions since each and every reference cited in this application contains a surfactant or a suggestion to add a surfactant. Therefore, it is the examiner's further position that the addition of the amphoteric surfactant of Moffatt et al. along with its ability to prevent bleeding would have been obvious to one having ordinary skill in the art absent a showing to the contrary. Furthermore, applicants argue that the Moffatt et al. reference does not specifically exemplify the use of an amphoteric surfactant and therefore, there is no specific suggestion in the Moffatt et al. reference of using an amphoteric surfactant over other types of surfactants. The examiner disagrees since the example in the Moffatt et al. reference (see col. 8, lines 13-18 and claims 6, 7 and 13) includes an amphoteric surfactant (i.e. OAO, see col. 4, lines 19-50) in the

amounts as claimed by applicants in combination with a nonionic surfactant. Therefore, it is the examiner's position that the Moffatt et al. reference does provide a suggestion of using the amphoteric surfactant as claimed. It should be noted that "A reference can be used for all it realistically teaches and is not limited to the disclosures in its specific examples". See In re Van Marter et al 144 USPQ 421; In re Windmer et al 147 USPQ 518, 523; and In re Chapman et al 148 USPQ 711. The examiner suggests providing evidence that an ink containing an amino acid and an amphoteric surfactant would have unexpected results as compared to an ink containing an amino acid and a surfactant other than amphoteric such as nonionic and/or cationic surfactant. Applicants should note that the examples in the specification only compare an ink containing an amino acid and an amphoteric surfactant to an ink that does not contain an amino acid but does contain an amphoteric surfactant. The examiner will consider any evidence as described above as long as it is submitted in response to this Office Action.

Conclusion

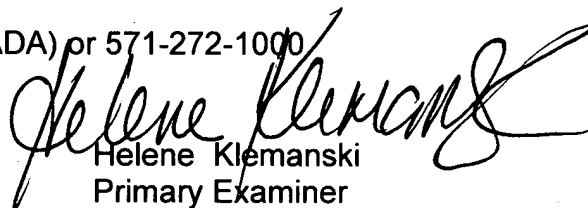
The remaining references listed on forms 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Helene Klemanski whose telephone number is (571) 272-1370. The examiner can normally be reached on Monday-Friday 5:30-2:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on (571) 272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Helene Klemanski
Primary Examiner
Art Unit 1755



HK
March 20, 2007